

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (CURRENTLY AMENDED) An information recording apparatus comprising:

a substitute information generating device for generating substitute information by using identification information unique to each of information recording media in which recording information is to be recorded;

a substituting device for ~~generating substituted recording information by substituting part of the recording information with the generated substitute information for part of the recording information;~~ and

a recording device for recording the ~~generated substituted recording information, part of which is substituted with the generated substitute information,~~ in the information recording medium corresponding to the identification information used for the generation of the substitute information,

wherein the generated substitute information has a data length within a range correctable by an error correction capability.

2. (CURRENTLY AMENDED) The information recording apparatus according to claim 1, further comprising a generating device for encrypting the recording information by using predetermined key information to generate encrypted recording information, wherein the substituting device ~~generates the substituted recording information by substituting~~ substitutes

part of the generated encrypted recording information with the generated substitute information
~~for part of the generated encrypted recording information,~~ and the recording device records the
key information, together with the generated encrypted recording information including the
generated substitute informationsubstituted recording information, in the information recording
medium corresponding to the identification information used for the generation of the substitute
information.

3. (ORIGINAL) The information recording apparatus according to claim 2, wherein the
substitute information generating device generates the substitute information including the key
information.

4. (ORIGINAL) The information recording apparatus according to claim 2, further
comprising a key information encrypting device for encrypting the key information by using the
identification information to generate encrypted key information, wherein the recording device
records the generated encrypted key information in place of the key information, in the
information recording medium.

5. (ORIGINAL) The information recording apparatus according to claim 4, further
comprising an identification information encrypting device for encrypting the identification
information by performing a predetermined encrypting process to generate encrypted
identification information, wherein the key information encrypting device encrypts key

information by using the generated encrypted identification information to generate the encrypted key information.

6. (ORIGINAL) The information recording apparatus according to claim 1, wherein the substitute information generating device generates the substitute information by using encrypted identification information obtained through a predetermined encrypting process performed to the identification information.

7. (ORIGINAL) The information recording apparatus according to claim 5, wherein the encrypting process is a process to encrypt the identification information by using a predetermined unidirectional encrypting function.

8. (ORIGINAL) The information recording apparatus according to claim 1, further comprising an adding device for adding a correction code for error correction to the recording information to generate added recording information, wherein the substituting device substitutes the generated substitute information for part of the added record information to generate the substituted recording information.

9. (CURRENTLY AMENDED) The information recording apparatus according to claim 1, wherein the recording device records the identification information used for the generation of the substitute information, together with ~~the generated substituted recording information~~ the

recording information including the generated substitute information, in the information
recording medium corresponding to the identification information.

10. (CURRENTLY AMENDED) The information recording apparatus according to claim 1,
wherein the identification information is recorded in advance on the corresponding information
recording medium, and the substitute information generating device detects the recorded
identification information ~~to use~~ it for the generation of the substitute information.

11. (ORIGINAL) The information recording apparatus according to claim 1,
wherein the substituting device varies a mode of the substitution using the substitute information
by using the identification information.

12. (CANCELED).

13. (CANCELED).

14. (CURRENTLY AMENDED) An information recording medium in which recording
information is to be recorded, comprising:

an information recording region for recording ~~substituted record~~ the recording
information, part of which is substituted with ~~obtained by substituting~~ substitute information for
~~part of recording information, the substitute information generated by using identification~~

information unique to each of the information recording media ~~in which the recording information is to be recorded~~; and

an identification information recording region in which the identification information corresponding to the information recording medium is recorded,

wherein the generated substitute information has a data length within a range correctable by an error correction capability.

15. (CURRENTLY AMENDED) The information recording medium according to claim 14, wherein information recorded in the information recording region is ~~the substituted recording information obtained by substituting part of encrypted recording information with the generated substitute information for part of the encrypted recording information~~, the encrypted recording information being obtained through the encryption of the recording information by using the predetermined key information.

16. (CANCELED).

17. (CURRENTLY AMENDED) An information reproducing apparatus for reproducing information from an information recording medium in which recording information and identification information corresponding to the information recording medium are recorded, part of the recording information being substituted with substituted recording information obtained by substituting substitute information generated by using the identification information unique to each of the information recording media for part of recording information and the identification

~~information corresponding to the information recording medium are recorded;~~ the information reproducing apparatus comprising:

a detecting device for detecting the ~~substituted~~ recording information, part of which is substituted with the generated substitute information, from the information recording medium;

an identification information detecting device for detecting the identification information from the information recording medium;

a substitute information extracting device for extracting the substitute information from the detected ~~substituted~~ recording information;

an identification information extracting device for extracting the identification information from the extracted substitute information;

a comparing device for comparing the identification information extracted from the substitute information with the identification information detected from the information recording medium; and

a reproducing device for reproducing the recording information obtained from the detected ~~substituted~~ recording information only if the identification information extracted from the substitute information matches the identification information detected from the information recording medium,

wherein the generated substitute information has a data length within a range correctable by an error correction capability.

18. (CURRENTLY AMENDED) The information reproducing apparatus according to claim 17, wherein:

the ~~substituted~~ recording information, part of which is substituted with the generated substitute information, is obtained by substituting part of encrypted recording information with the generated substitute information for part of encrypted recording information, the encrypted recording information being obtained through encryption of the recording information by using a predetermined key information;

the key information and the obtained ~~substituted~~ recording information are recorded in the information recording medium corresponding to the identification information used for the generation of the substitute information;

the information reproducing apparatus further comprises a key information detecting device for detecting the key information from the information recording medium; and

the reproducing device decrypts the encrypted recording information obtained from the detected ~~substituted~~ recording information by using the detected key information and reproduces the recording information only if the identification information extracted from the substitute information matches the identification information detected from the information recording medium.

19. (ORIGINAL) The information reproducing apparatus according to claim 18, wherein the key information is contained in the substitute information and recorded in the information recording medium, and the key information detecting device detects the key information from the extracted substitute information.

20. (CURRENTLY AMENDED) The information reproducing apparatus according to claim 18, wherein:

encrypted key information obtained through encryption of the key information by using the identification information is recorded in the information recording medium in place of the key information;

the key information detecting device detects the encrypted key information from the information recording medium;

the information reproducing apparatus further comprises key information generating device for generating the key information through decryption of the detected encrypted key information by using the detected identification information; and

the reproducing device decrypts the encrypted recording information obtained from the detected ~~substituted recording information record~~ by using the generated key information and reproduces the record information only if the identification information extracted from the substitute information matches the identification information detected from the information recording medium.

21. (ORIGINAL) The information reproducing apparatus according to claim 20, wherein: the encrypted key information is obtained through the encryption of the key information by using encrypted identification information obtained from a predetermined encrypting process performed to the identification information and is recorded in the information recording medium; and the key information generating device decrypts the detected encrypted

key information by using the encrypted identification information obtained from the encrypting process performed to the detected identification information.

22. (ORIGINAL) The information reproducing apparatus according to claim 21, wherein the encrypting process encrypts information by using a predetermined unidirectional encrypting function.

23. (CURRENTLY AMENDED) The information reproducing apparatus according to claim 17, wherein:

the substitute information is generated by using ~~the~~ encrypted identification information obtained by ~~the~~ a predetermined encrypting process performed ~~to~~ on the identification information corresponding to the information recording medium in which the ~~substituted~~ recording information is to be recorded;

the information reproducing apparatus further comprises an identification information generating device for extracting the encrypted identification information from the extracted substitute information, decrypting the encrypted identification information by a decrypting process corresponding to the encrypting process, and generating the identification information; and

the reproducing device reproduces the record information only if the generated identification information matches the identification information detected from the information recording medium.

24. (CURRENTLY AMENDED) The information reproducing apparatus according to claim 17, wherein:

the substitute information is generated by using encrypted identification information obtained through a predetermined encrypting process using a predetermined unidirectional encrypting function performed ~~to~~ on the identification information corresponding to the information recording medium in which the ~~substituted~~ recording information is to be recorded;

the information reproducing apparatus further comprises an encrypted identification information extracting device for extracting the encrypted identification information from the extracted substitute information, and an encrypted identification information generating device for generating second encrypted identification information through the encrypting process by using the encrypting function performed to the detected identification information; and

the reproducing device reproduces the recording information only if the generated second encrypted identification information matches the extracted encrypted identification information.

25. (CURRENTLY AMENDED) The information reproducing apparatus according to claim 17, wherein:

the ~~substituted~~ record information, part of which is substituted with the generated substitute information, is generated ~~obtained~~ by substituting part of added recording information with the generated substitute information for part of added record information, the added recording information being generated by adding a correction code for error correction to the recording information and is recorded in the information recording medium;

the substitute information extracting device extracts the substitute information from the substituted-recording information before the error correction is executed; and

the information reproducing apparatus further comprises a correcting device for performing an error correction process ~~to-on~~ the detected substituted-recording information by using the correction code.

26. (CURRENTLY AMENDED) The information reproducing apparatus according to claim 17, wherein:

a mode of the substitution using the identification information in the substituted-recording information is varied by using the substitute information; and

the substitute information extracting device extracts the substitute information from the detected substituted-recording information based on the mode of the substitution specified by using the detected identification information.

27. (CANCELED).

28. (CANCELED).

29. (CURRENTLY AMENDED) An information recording method comprising:

a substitute information generating process of generating substitute information by using identification information unique to each of information recording media in which recording information is to be recorded;

a substituting process of ~~generating substituted recording information by substituting part of the recording information with~~ the generated substitute information ~~for part of the recording information~~; and

a recording process of recording the ~~generated substituted recording information, part of which is substituted with the generated substitute information,~~ in the information recording medium corresponding to the identification information used for the generation of the substitute information,

wherein the generated substitute information has a data length within a range correctable by an error correction capability.

30. (CURRENTLY AMENDED) The information recording method according to claim 29, further comprising a generating process of encrypting the recording information by using a predetermined key information to generate encrypted recording information, wherein the substituting process ~~generates the substituted recording information by substituting~~ substitutes part of the generated encrypted recording information with the generated substitute information ~~for part of the generated encrypted recording information,~~ and the recording process records the key information, together with the generated encrypted recording information including the generated substitute information ~~substituted recording information,~~ in the information recording medium corresponding to the identification information used for the generation of the substitute information.

31. (CANCELED).

32. (CURRENTLY AMENDED) An information reproducing method for reproducing information from an information recording medium in which recording information and identification information corresponding to the information recording medium are recorded, part of the recording information being substituted with ~~substituted recording information obtained by substituting~~ substitute information generated by using the identification information unique to each of the information recording media ~~for part of recording information and the identification information corresponding to the information recording medium are recorded~~; the information reproducing method comprising:

a detecting process of detecting the ~~substituted~~ recording information, part of which is substituted with the generated substitute information, from the information recording medium;

an identification information detecting process of detecting the identification information from the information recording medium;

a substitute information extracting process of extracting the substitute information from the detected ~~substituted~~ recording information;

an identification information extracting process of extracting the identification information from the extracted substitute information;

a comparing process of comparing the identification information extracted from the substitute information with the identification information detected from the information recording medium; and

a reproducing process of reproducing the recording information obtained from the detected ~~substituted~~ recording information only if the identification information extracted from

the substitute information matches the identification information detected from the information recording medium,

wherein the generated substitute information has a data length within a range correctable by an error correction capability.

33. (CURRENTLY AMENDED) The information reproducing method according to claim 32, wherein:

the substituted-recording information, part of which is substituted with the generated substitute information, is obtained by substituting part of encrypted recording information with the generated substitute information for part of encrypted recording information, the encrypted recording information being obtained through encryption of the recording information by using a predetermined key information;

the key information and the obtained ~~substituted~~-recording information are recorded in the information recording medium corresponding to the identification information used for the generation of the substitute information;

the information reproducing method further comprises a key information detecting process of detecting the key information from the information recording medium; and

the reproducing process decrypts the encrypted recording information obtained from the detected ~~substituted~~-recording information by using the detected key information and reproduces the recording information only if the identification information extracted from the substitute information matches the identification information detected from the information recording medium.

34. (CANCELED).

35. (CURRENTLY AMENDED) A program information recording medium in which an information recording control program is readably recorded by a computer included in an information recording apparatus for recording information in an information recording medium, the information recording control program causing the computer to function as information recording control devices, the information recording control devices comprising:

a substitute information generating device for generating substitute information by using identification information unique to each of information recording media in which recording information is to be recorded;

a substituting device for ~~generating substituted recording information by substituting part of the recording information with~~ the generated substitute information ~~for part of the recording information;~~ and

a recording device for recording the ~~generated substituted recording information,~~ part of which is substituted with the generated substitute information, in the information recording medium corresponding to the identification information used for the generation of the substitute information,

wherein the generated substitute information has a data length within a range correctable by an error correction capability.

36. (CURRENTLY AMENDED) The program information recording medium according to claim 35, wherein the information recording control program causes the computer to function as information recording control devices, the information recording control devices further comprising a generating device for encrypting the recording information by using predetermined key information to generate encrypted recording information, where

the substituting device ~~generates the substituted recording information by substituting~~ substitutes part of the generated encrypted recording information with the generated substitute information ~~for part of the generated encrypted recording information~~, and the recording device records the key information, together with the generated encrypted recording information including the generated substitute information ~~substituted recording information~~, in the information recording medium corresponding to the identification information used for the generation of the substitute information.

37. (CANCELED).

38. (CURRENTLY AMENDED) A program information recording medium in which an information reproducing control program is readably recorded by a computer included in an information reproducing apparatus for reproducing information from an information recording medium in which recording information and identification information corresponding to the information recording medium are recorded, part of the recording information being substituted with ~~substituted recording information obtained by substituting substitute information generated~~ by using the identification information unique to each of the information recording media ~~for~~

~~part of recording information and the identification information corresponding to the information recording medium are recorded,~~ the information reproducing control program causing the computer to function as information reproducing control devices, the information reproducing control devices comprising:

a detecting device for detecting the ~~substituted~~ recording information, part of which is substituted with the generated substitute information, from the information recording medium;

an identification information detecting device for detecting the identification information from the information recording medium;

a substitute information extracting device for extracting the substitute information from the detected ~~substituted~~ recording information;

an identification information extracting device for extracting the identification information from the extracted substitute information;

a comparing device for comparing the identification information extracted from the substitute information with the identification information detected from the information recording medium; and

a reproducing device for reproducing the recording information obtained from the detected ~~substituted~~ recording information only if the identification information extracted from the substitute information matches the identification information detected from the information recording medium,

wherein the generated substitute information has a data length within a range correctable by an error correction capability.

39. (CURRENTLY AMENDED) The program information recording medium according to claim 38 wherein:

the ~~substituted~~ recording information, part of which is substituted with the generated substitute information, is obtained by substituting part of encrypted recording information with the generated substitute information for part of encrypted recording information, the encrypted recording information being obtained through encryption of the recording information by using a predetermined key information;

the key information and the obtained ~~substituted~~ recording information are recorded in the information recording medium corresponding to the identification information used for the generation of the substitute information;

the information reproducing control program causes the computer to function as information reproducing control devices, the information reproducing control devices further comprising a key information detecting device for detecting the key information from the information recording medium; and

the reproducing device decrypts the encrypted recording information obtained from the detected ~~substituted~~ recording information by using the detected key information and reproduces the recording information only if the identification information extracted from the substitute information matches the identification information detected from the information recording medium.

40. (CANCELED).

41. (NEW) The information recording apparatus according to claim 1, wherein a recording position of the recording information, part of which is substituted with the generated substitute information, is set in advance and is used in common between the information recording apparatus and an information reproducing apparatus.

42. (NEW) The information recording medium according to claim 14, wherein a recording position of the recording information, part of which is substituted with the generated substitute information, is set in advance and is used in common between an information recording apparatus for recording the recording information and an information reproducing apparatus for reproducing the recording information.

43. (NEW) The information reproducing apparatus according to claim 17, wherein a recording position of the recording information, part of which is substituted with the generated substitute information, is set in advance and is used in common between an information recording apparatus for recording the recording information and the information reproducing apparatus.

44. (NEW) The information recording method according to claim 29, wherein a recording position of the recording information, part of which is substituted with the generated substitute information, is set in advance and is used in common between an information recording apparatus for recording the recording information and an information reproducing apparatus for reproducing the recording information.

45. (NEW) The information reproducing method according to claim 32, wherein a recording position of the recording information, part of which is substituted with the generated

substitute information, is set in advance and is used in common between an information recording apparatus for recording the recording information and an information reproducing apparatus for reproducing the recording information.

46. (NEW) The program information recording medium according to claim 35, wherein a recording position of the recording information, part of which is substituted with the generated substitute information, is set in advance and is used in common between the information recording apparatus and an information reproducing apparatus.

47. (NEW) The program information recording medium according to claim 38, wherein a recording position of the recording information, part of which is substituted with the generated substitute information, is set in advance and is used in common between an information recording apparatus and the information reproducing apparatus.